

## Professional Doctorates: a reflective study of impact

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*Professional Doctorate programmes are well established but consideration of the impact of research projects undertaken as part of the Professional Doctorate is limited. After initial discussion of the nature of the Professional Doctorates which we lead, and the experiences of candidates within these programmes, we use our experience to consider the impact of the projects against criteria identified by the Economic and Social Research Council (ESRC).*

*Impact is considered at the personal, organisational and national level, and across economic and societal as well as academic spheres. Based on our experience, we argue that Professional Doctorates have considerable personal impact, impact on the professional work of the individual, and impact on the development of the workforce. In addition, impact is seen in the application of theory to practice-based issues within and between professional groups, and in the development of organisational practice and policy. We suggest that impact can also be evident in developing technical capacity, developing new models, reframing debates and developing theory. Impact can be at the level of the organisation, the local community, or at a national level.*

*The paper ends with an invitation to debate the issue of impact from Professional Doctorate research.*

**Keywords:** Professional Doctorate, impact, academic impact, professional impact, organisational impact, research impact.

## **Introduction**

The Professional Doctorate in the UK has many forms. In this paper we share the structure of the Professional Doctorate at Anglia Ruskin University, specifically as demonstrated through the Doctorate in Education (EdD) and the Professional Doctorate in the Built Environment. The structure here is distinctive in that it is not currently based on taught modules. However, candidates still can operate as a cohort and are given a lengthy period of time (up to two years) before formally submitting their research proposal for approval. During this time their skills are developed and examined through a series of papers on practice, theory and research design. The focus throughout is on the candidate's professional practice issue, and research into this issue to impact on and improve practice. We present our Professional Doctorate as a case study of impact. We argue that research into one's own practice has impact not just on oneself and one's own practice, but also on organisational practice and in the national arena. We further argue that our examples evidence that impact is achieved not just in the sphere of professional practice, but also in generation of knowledge and theory.

## **Aims and experiences of the Professional Doctorate**

Candidates on the Professional Doctorate programmes at Anglia Ruskin University are typically experienced, senior professionals in their own sphere of practice, often in leadership or management roles, or roles which require high levels of skill and expertise. They are often known for their work in the local community, or further afield in the regional, national or even international community in which they specialise. For Education, these candidates include, for example, Headteachers and Academy Chain Executive Heads, Heads of Department, University lecturers, Local Authority experts. For the Built Environment, candidates include Civil Engineers, Planners, Surveyors and Construction Managers. The Professional Doctorate was devised for just this group of experienced, professional people (Mellors-Bourne et al, 2016) and this type of doctoral programme is attractive to them. A common feature is that these candidates have a desire to and, more importantly, are in a position to, bring about real change to their practice and that of their organisation whilst

completing their doctorate. Burgess and Wellington (2010) identify that many professionals who undertake a Professional Doctorate programme do so with the express intention of having a positive impact on their career.

What is less well known is the experiences of these candidates as they go through the doctoral programme, and the impact of their doctoral work. Important work in this area includes that by Burgess and Wellington (2010) who used personal reflections from candidates who had either completed or were working towards a Professional Doctorate, in addition to an analysis of Professional Doctorate theses. This study identified impact from the doctorate on the professional careers, discourse, and personal lives of doctoral candidates. Burgess et al (2011) report from an extension to this research which identified the considerable conflicts experienced by candidates during the doctoral journey, which particularly impacted on the personal development of the candidates. The ability of the doctorally qualified practitioner to influence practice was challenged in this study, as the workplace was not always receptive nor were networks commonly available to disseminate good practice.

The importance of the workplace and the support from the candidate's host organisation cannot, in our experience, be overstressed. Success comes from a strong synergy between the doctorate and the candidate's work practice. Two examples here illustrate the point. One of our candidates had to withdraw from the programme because, although they had a suitable project focused on an important aspect of their professional practice, it represented a small part of their day to day work. In addition their employer failed to understand the nature of the Professional Doctorate, regarding it as more of a weekend course their employee was undertaking. The candidate was unable to secure the support they needed; was unable to instigate the changes they desired; the doctorate was getting in the way of other work and, consequently, the candidate was unable to complete within the regulatory registration period. At the other extreme, another of our candidates was able to complete the part-time doctorate in just over three years. This achievement was made possible, not only because of the hard work and dedication of the candidate, who was very experienced in the theoretical and legal aspects of the research, but by

the very strong connection between the candidate's workplace and the doctorate. The case study evidence required to inform the research was readily available in the office and drawn from their work practice and a small band of like-minded professionals who were experts in the field formed an effective focus group. The requirements for their work and the doctorate were almost one and the same thing with total support from the employer who realised the benefits of this special form of education.

For the programme at Anglia Ruskin University, the candidate must have a project in mind on entry to the programme, and draw on their past and existing expertise in identifying this project. This immediately provides an opportunity to have an impact on professional practice from the start, perhaps more so than the traditional PhD (for more detail about the structure of the programme see Frame & Davis, 2015). This potential for impact on professional practice is discussed at interview, and for some applicants the lack of linkage to practice is a reason for rejection of the application. The level of professional expertise in the candidate's field means that the professional arena is very well known to them. The candidate understands the workings of their organisation, understands mechanisms by which changes are made within and beyond their organisation and typically has a network of colleagues both within and beyond their own organisation as part of their professional role. For example, in our experience, candidates typically have existing collaborative networks, professional networks and a community of practice from which they both learn and provide expertise. It is from this expertise that the project is derived, it is practice-led, not derived from the University or the supervisors.

In our experience, it is a shock for many candidates when they enter the Doctoral programme, to find that they have come to a very different environment, one which is both unfamiliar and difficult to navigate, something identified in research and writing in this field (Burgess & Wellington, 2010; Burgess et al, 2011, Mann, 2014). For many, it feels like a foreign country, where the rules and practices are very different to the norms experienced in their working world. The system can appear rigid (for example procedures for referencing, obtaining ethical approval) and can appear as

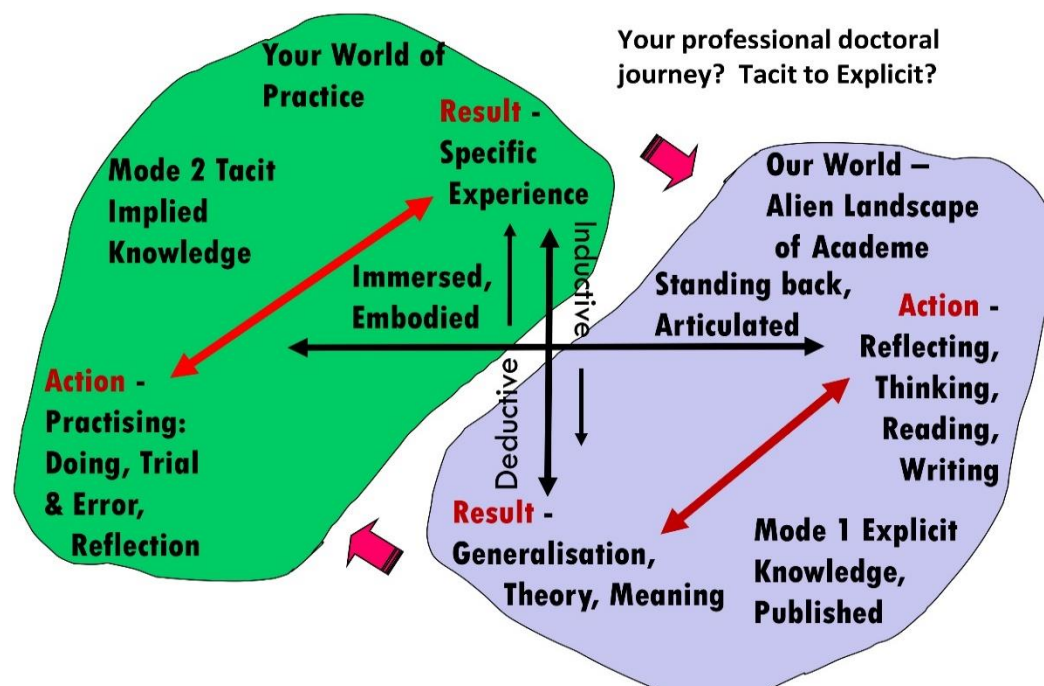
lacking in trust for the candidates, for example the requirement to produce originality reports on written work. The writing style itself is very different, and requires a new skill set. Candidates consider that they are existing in two very different worlds; their familiar world of practice in which they feel safe because they know the rules of the game, and the unfamiliar world of academe in which they feel like a newcomer, inexperienced, faced with unknown risks (Burgess & Wellington, 2010). Navigating this new environment requires a new set of skills, and the impact, at a personal level, of moving from a place of relative familiarity to the world of academia is considerable (see below). Yet, navigate they must during their doctorate which brings these two worlds together to produce the thesis.

The candidates begin their doctoral journey by using a doctoral lens to re-examine and reflect on their existing experience, so that new insights can be established. The emphasis on real-world, current problems being experienced in the professional arena gives currency, relevance, drive and impact to the project (Armsby & Costley, 2009). However, a common problem for our candidates at the start of their programme is that they often struggle with the deep reflection advocated by Raelin (2008). The first assessed paper they complete is a reflection piece on their practice with the view to establishing the case from that practice for their research. We have found that they often do not possess the reflective skills required and, as a result, this takes time to develop. They have acquired a substantial amount of Mode 2 knowledge (Gibbons, Limoges & Nowotny, 1994) over many years of practice. As a result, they come to the doctorate with very strong opinions and yet struggle to articulate how these opinions were formed.

To successfully bridge the gap between relevant, professional research and research which also meets the rigour of academic review, successful candidates are able to use research approaches which create a real synergy between their practice and their doctorate. Moving between their spheres of practice and academia, tacit knowledge is made explicit (Kolb, 1984). Using Kolb's model of experiential learning to consider this, it is the 'concrete experience' of the experienced practitioner which brings them to the doctorate in the first place. Entering the doctoral process enables a process of

'reflective observation', where the candidate questions what is happening and why, and develops the focus for their research project. The process of 'abstract conceptualisation' enables a deeper consideration of the issue, the literature is explored, the research project is designed and data are collected, and the tacit knowledge is now explicit. These processes form further written papers for our candidates which can be incorporated into the thesis. Kolb's (1984) phase of 'active experimentation' can be equated to consideration of the findings in terms of the practice setting, what recommendations can be made, what changes are required, in fact, what is the impact on professional practice?

Figure 1. The Professional Doctorate - Merging Practice with Theory (Adapted from Mann, 2014)



Although candidates can find it difficult to move from their familiar world of practice to what they sometimes regard as the alien landscape of academia (Mann, 2014), this longer reflective route (Figure 1) enables them to start to make connections. They learn to see how theory informs practice as they engage in deductive reasoning, and that their specific concrete experience relates to and can inform and strengthen theory. They begin to reflect more on the actions they are taking at work and are able to articulate their findings to others. It takes time to engage with the underpinning theory of their practice but this provides a deeper understanding of the practical issues gained through examination at doctoral level, with the potential for positive change.

The structure of the Professional Doctorate at Anglia Ruskin University aims to recognise the various challenges candidates will experience, and to support them through these. The early structure of the programme, around written papers to develop the proposal, is followed by the appointment of a supervisory team for each candidate. Candidates continue to attend workshops throughout their programme of study. Within these workshops, the various activities, presentations, peer review of work, writing activities, discussion of methodology and methods, all provide opportunities for working with academic staff and working with peers.

The role of the academic staff is to support the doctoral candidate by acting as a facilitator, working with the candidate's own expertise while sharing their own. Thus the academic is able to support the development of the candidate's knowledge and understanding of methodology and method, the application of academic rigour, and to support the development of confidence in writing at doctoral level, something most of our candidates find challenging, at least initially. The doctoral candidate may have greater specific professional knowledge and expertise, and better knowledge and understanding of the practice sector, than the academic staff who are supervising, but the academic staff are the experts in working at doctoral level, methodology, and academic rigour. Academic staff also support the candidate to understand some of the wider issues of research, to work through academic and professional challenges,

and to identify ways in which research can be disseminated. In addition to the academic support, the cohort effect should not be underestimated. The opportunity for discussion of practice and research issues, and peer review of developing research ideas and writing are powerful (see Garnett et al, 2009). This is most evident in the multi-disciplinary workshops where, whilst individually candidates may experience difficulty resolving issues, collectively their group output from the workshop activity offers effective solutions. Together they can achieve much more. The cohort nature of the programme often inspires individuals to re-engage with their doctorate with a renewed vigour after each workshop and this impacts positively on doctoral work.

In this way, candidates develop confidence and they often recognise that there is a clear gap between theory and practice, and they have the opportunity to bridge that gap and enable theory to enhance professional practice. Where theory is not being used, or new theory is needed, this is identified by the candidate and drives their research and its potential for impact at not just the practice level but also at the level of theory. In this way, candidates can find themselves in an almost unique position to transform practice with the aid of a strong theoretical underpinning.

### **Impact of the Professional Doctorate**

The ESRC (2016) identifies research impact in two main categories: academic impact; economic and societal impact. Across these categories, the impact may be instrumental, conceptual, or capacity building. Within the rest of this paper we explore evidence of impact within the Professional Doctorate research projects within our two programmes. Our ideas about perceived impact of current and completed Professional Doctorate research projects are discussed below with examples.

#### ***Impact – personal***

The projects are identified by the candidates themselves, and the candidates are therefore integrally involved with their projects in relation to their professional practice (Partington, 2002). Although the project is the main focus, the impact is not just about the project, the impact is also personal. All candidates on the Professional



Doctorate programmes identify experiencing a 'journey', and elements of this have been reported in the literature (Burgess et al, 2011). This journey includes new learning, new experiences, and getting to grips with a new culture. Our candidates similarly report a 'learning journey', but they also identify the personal impact of the doctorate. This impact is defined in terms of: general development of confidence; development of ability to critically analyse work-based issues or reports; development of improved presentation skills; improved ability to support the development of others in their work setting; improved understanding of issues through more detached thinking, leading to the ability to challenge assumptions within the practice field. Just as their practice becomes an integral part of their doctorate, the doctorate in turn becomes an integral part of their practice, changing the way they work with colleagues. For example higher education lecturers who are candidates on the Professional Doctorate programmes report a change in the way that they supervise undergraduate students' projects. They use techniques which support the student to think and to explore new ideas and they do this differently to the way they have supervised in the past. They also report better ability to confidently construct an argument for change in practice. Headteachers who have been Professional Doctorate candidates have explained that they have developed better understandings of ways to incorporate the views of all stakeholders in decisions at school, including teachers, parents and children. On the Built Environment Professional Doctorate candidates have found that just being on the doctorate has opened doors within their own organisation which previously were closed. They have improved access to senior managers who actively support their work and their action research approach enables them to have more influence on, and cooperation from, colleagues. The doctorate can help raise their profile within their company and in the wider professional field. This is an impact that takes many candidates by surprise.

Burgess et al (2011) identified that the process of undertaking the Professional Doctorate had significant impact on the individual in both cognitive and affective domains of learning. These authors identified that candidates at the start of their doctorate emphasised the 'product' from the doctorate, the research also confirmed earlier findings, with the development of discourse in candidates which strengthened

communication and was perceived by them and their work colleagues to have greater impact than prior to the doctorate. Our experiences with Built Environment and Education Professional Doctorate candidates supports the views of Burgess and Wellington (2010) who found that both during and after completing the Professional Doctorate, candidates identified that the doctorate had had personal impact. The personal impact of the doctorate impacts on their professional persona, to increase their professional influence. Supervisors on the programme have also reported witnessing this transformative journey in their candidates. Graduates of the programme were more confident to engage in debate and challenge others' views and professional practice assumptions, as well as to listen to others more carefully. Candidates have reported that they now read professional reports more critically and are more likely to ask colleagues to provide evidence to support their case. Consequently, more careful consideration is given to their decision-making in practice. In addition, doctoral graduates developed more scholarly approaches to their everyday work, for example, in improved analytical writing. This sometimes unexpected change to the individual has been reported to us by a number of the candidates' host organisations. For example by candidates demonstrating greater critical engagement in meetings, greater confidence in communication, and improved negotiation skills.

In terms of economic and societal impact (ESRC, 2016) workforce development and capacity building, it can be argued that working through a doctoral programme will in itself lead to development of individuals through personal skill development, which will build capacity, whatever the outcome of the research project itself.

#### ***Impact – Organisational/Local***

The 2014 Report by CFE Research identified that doctoral graduates contribute to organisations not only through their own personal development but through the way these doctoral graduates encourage improved problem solving and creative thinking in their work colleagues. Our experience with Professional Doctorate candidates supports this view. For example head teacher Professional Doctorate graduates have identified their ability to better seek creative participation of their staff and

parents/families. At an organisational level, our Doctorate candidates have made differences in terms of practice and policy. For example changing the arrangement of the curriculum in a large secondary school to support life-long learning, changing the way in which 'school image' is considered in relating to parents and families, and changing the opportunities for Higher Education students to be involved in decisions about teaching and learning within a Faculty. Built Environment candidates have been influential in improving performance of low energy construction to help meet European Union targets for reducing the impact of building on global warming, changing the way local authorities procure and manage construction contracts, and improving understanding of right-to-light disputes between building owners and developers.

Making a difference also extends to involvement of the local community. For example, a project about how parents choose a school for their child has enabled the three schools involved to reconsider how they communicate with prospective parents and families. In several cases, senior school teachers have extended learning from the substance of their project to influence practice within the wider community across the region, for example sharing research findings across regional schools has changed the emphasis within teaching and learning activities to more effectively stretch more able children. This has been achieved using existing networks but the candidates have moved from participants in these networks to leadership roles in the networks.

The ability to more readily work across professional boundaries was identified as an important element of Professional Doctorate study by Fulton et al (2012). Within our experience, largely as a result of our multi-disciplinary cohort approach to research, doctoral candidates, who enter the programme with a singular professional focus, are able to recognise parallel issues and potential solutions within other professions. For example, two Professional Doctorate candidates who are health professional lecturers and researching potential curriculum development opportunities have sought examples from other professional spheres, such as nursing and social work. In this way they are able to reframe the debate in their own profession by consideration of alternative methods and structures. In these cases, personal confidence has been

extended and the ability to see potential solutions in a wider field is developed. Equally, recommendations from a Professional Doctorate research project within one profession may make recommendations beyond that professional sphere. This is a particularly important aspect for the Built Environment candidates where a large range of different professions operating in practice do not often have the opportunity for open honest discussion. Candidates on the programme have reported they feel more comfortable to lower their professional guard to engage in open debate in a critical yet friendly supportive workshop environment. That is, 'research-generated knowledge' is both 'useful and usable in practice' (Cain & Hayward, 2015: 27), not just within one sector, but potentially within the wider sector.

The personal development of the candidate as a professional researcher develops confidence and ability to generate and lead further research projects in their own workplace and practice within their community. Examples of post-doctoral research from our Professional Doctorate candidates includes: improved local authority practices for the procurement of construction contracts being adopted by other local authorities; and a regional study with a number of schools to develop digital learning.

The ESRC identify instrumental impact as research which influences policy development, practice development, provision of service, and change in behaviour. Conceptual impact is identified as research which contributes to understanding of policy issues and reframes debate. The examples above demonstrate that Professional Doctorate research projects have the potential for impact at both the conceptual and the instrumental level.

### ***Impact – National***

We are able to identify some impact at a national level for projects from the Professional Doctorate programmes. Firstly from the Built Environment programme, one of our graduates has become a leading figure in right-to-light disputes, influencing policy change at professional body level. Within the Doctorate of Education, consideration of the best way to educate some health care practitioners is suggesting

the need for specialised, relevant and focussed undergraduate degree programmes and the generation of new professional categories to support better education and better professional practice. In both these instances, the impact is a direct result of the project undertaken for the Professional Doctorate. The impact of work which develops after completion of the doctorate, as a result of the doctoral project, requires further consideration. As we see more graduates from these Doctorates, we are expecting to see greater evidence of national impact in the post-doctorate phase.

### ***Impact – academic***

A major impact from the Professional Doctorate research projects (in addition to the personal and organisational impact identified above) is the application of theory to practice-based issues to improve professional practice, whether this be better practice in working with people, with policy and procedures, with technology or with other significant work-based issues. Our experience is that every one of the projects has some impact in this 'theory-practice' sense. It could be argued that this is the only realistic academic impact of a Professional Doctorate programme, and certainly one that is expected by the criteria set for achievement of a Professional Doctorate Award. The QAA descriptor 4.18.3 identifies the expectation for Professional Doctorates to produce a contribution to professional knowledge and practice (QAA, 2014: 30).

However, our experience suggests academic impact beyond this link between theory and practice. Although the major impact from Professional Doctorate research appears to be on economic or societal factors, and the application of theory to practice, the impact is not limited to these areas. We have emerging evidence of the potential to develop theory and build models to better understand practice. Just as practice can be deductively informed by engagement with theory, theory can be informed from practice, as the candidates develop their tacit knowledge into more explicit forms. For example, a project exploring the use of mobile devices for learning can be considered as building technical capacity as well as advancing understanding of how learning occurs when using mobile devices, in other words providing advances in theory. Advances in the understanding of practical processes on energy use, planning development, regeneration, dispute resolution, have conceptual

implications, contributing to and reframing debate. Using another example, a project which explored how homework can best support children and families has led to a rethinking of the way in which homework is conceptualised and from this reframing homework to better engage with the local and regional community. Thus new conceptualisations and model building within Professional Doctorate projects can challenge existing views, develop different ways of working and test new methods.

Finally, in terms of academic impact, we suggest that Professional Doctorate projects can lead to the development of research methods, although our evidence for this is at an early stage. For example, within the Doctorate in Education there has been development within one project of the use of card sort as a data collection method and methods are being explored to ensure the voice of the child or the student is heard more clearly within the research project. Historically, built environment research has been dominated by the more positivistic approaches (Knight & Ruddock, 2008). The Professional Doctorate provides new opportunities for non-positivistic research, for example through action research, as candidates change and influence practice. This has the potential to cross boundaries and open opportunities for cross disciplinary working. The ESRC (2016) identify academic impact as advances both within a field of study, and beyond it, whether this be better understanding, improved methods, advances in theory or advances in application. The potential for Professional Doctorate research projects to have academic impact is identified in the examples above.

### ***Summary of impact***

Our argument, therefore, is that we should and can expect impact from Professional Doctorate research, impact which is at the personal, professional practice and organisational levels. Personal impact can impact positively on the enactment of the professional role of the candidate, and provide capacity building for personal and professional development including skills development. Organisations and local communities benefit from challenges to existing ways of thinking, reframing organisational debates, engaging communities, and changing local practice and policy.

We also argue that impact from Professional Doctorate research is possible in development of theory, method and the reframing of theoretical and practice-based debates beyond the personal and local arenas.

As a research community we need to discuss how we can best evidence impact from Professional Doctorates. The ESRC (2016) main categories seem clear: academic impact; economic and societal impact. Across these two main categories we can identify evidence of instrumental, conceptual or capacity building impact. We have summarised the impact individual projects are having and identified that these projects can have a wider range of potential impact than may be expected. Would a visual representation of the range of impacts be useful to categorise impact from the different projects from a particular Professional Doctorate programme? This could be used to demonstrate where most of the impact is. For example in our experience the benefits to individuals and organisations, and the academic impact of promoting understanding and application, are the main areas of impact from the Professional Doctorate. As a research community we also need to focus on particular areas of work, and this is something which Higher Education Institutions need to consider to enable impact to be tied to other work in the field for which the University department is specialised. Currently the impact of the individual and collective Professional Doctorate projects is relatively hidden. PhD projects often arise from the work of the academic department. By contrast, the very nature of Professional Doctorates, which originate from professional practice may not routinely link to the academic work of the department, and it may be incumbent on the supervisor to actively consider where impact of Professional Doctorate research can link to existing research in the academic department. Being explicit about impact can enhance the evidence of impact of research and demonstrate engagement in practice, policy and society.

### **Research Implications**

Professional Doctorate candidates at Anglia Ruskin University have found that their unique doctoral journey, within a multiprofessional environment and a cohort of other doctoral researchers, facilitates their learning and their ability to link theory and practice and solve practice-based problems. The doctoral candidates demonstrate

that impact results from their research, at the personal, organisational and sometimes national level, and across economic and societal as well as academic categories.

We are interested in others' views of impact from Professional Doctorate research and how this impact can be identified and more widely considered. There is potential for impact from Professional Doctorates to be more closely allied to the impact of departmental research. Models for considering such impact could be usefully shared across the academic sector to develop best practice.

## References

Armsby, P. & Costley, C. (2009). Developing Work based learning at Doctoral level. In: *Work based learning*. Middlesex: Middlesex University Press. Chapter 9.

Burgess, H. & Wellington, J. (2010). Exploring the impact of the professional doctorate on students' professional practice and personal development: Early indications. *Work Based Learning e-Journal*, 1 (1): 160 - 176.

Burgess, H., Weller, G. & Wellington, J. (2011). Tensions in the purpose and impact of professional doctorates. *Work Based Learning e-Journal*, 2(1): 1-20.

Cain, T. & Hayward, L. (2015). Excellence in teaching: can it be achieved through educational research? *Research Intelligence*, 128: 26-27.

CFE Research (2014). *The impact of doctoral careers*. Report by CFE Research for Research Councils UK. Swindon: RCUK.

ESRC (2016). *What is impact?* URL: <http://www.esrc.ac.uk/research/evaluation-and-impact/what-is-impact/> Accessed on 12<sup>th</sup> April, 2016.

Frame, I. & Davis, G. (2015). *The Professional Doctorate at Anglia Ruskin University: A model of successful practice*. In: Conference proceedings, UCF International Conference on Doctoral Education, College of Education and Human Performance,



University of Central Florida. URL: <http://education.ucf.edu/reg/docs/ICDE2015-PaperPresentationAbstracts.pdf> Accessed 12<sup>th</sup> April, 2016.

Fulton, J. Kuit, J., Sanders, G. & Smith, P. (2012). The role of the Professional Doctorate in developing professional practice. *Journal of Nursing Management*, 20 (1): 130-139.

Garnett, J., Costley, C. & Workman, B. (2009). *Work based learning*. Middlesex: Middlesex University Press.

Gibbons, M., Limoges, C. & Nowotny, H. (1994). *The New Production of Knowledge*. London: Sage.

Knight, A. & Ruddock, L. (2008). *Advanced Research Methods in the Built Environment*. Oxford: Wiley-Blackwell.

Kolb, D.A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall.

Mann, P. (2014). *Fundamentals in a Professional Doctorate* [Workshop to DProf Candidates]. 12 October 2014.

Mellors-Bourne, R., Robinson, C. & Metcalfe, J. (2016). *Provision of professional doctorates in English HE institutions*. Cambridge: Careers Research & Advisory Centre (CRAC) Ltd. URL: <http://www.ukcge.ac.uk/content/publications-search.aspx?lstCategory=5> Accessed on 12<sup>th</sup> April, 2016.

Partington, D. (Ed.) (2002). *Essential skills for Management Research*. London: Sage

QAA (2014). *The Frameworks for UK Higher Education Qualifications of UK Degree-Awarding Bodies*. The Quality Assurance Agency for Higher Education: Gloucester.

URL:<http://www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=2843#.V3I3D6NwZdh>. Accessed 28<sup>th</sup> June 2016.

Raelin, J. A., (2008). *Work-based learning: Bridging Knowledge and Action in the Workplace*. San Francisco: Jossey-Bass.

Scott, D., Brown, A., Lunt, I. & Thorne, L. (2004). *Professional Doctorates: Integrating Professional and Academic Knowledge*. Maidenhead: Open University Press.

Thorne, L., Brown, A., Lunt, I., & Scott, D. (2002). 'Professional Doctorates and their Contribution to Professional Development and Careers: Full Report for ESRC'. URL: <http://www.researchcatalogue.esrc.ac.uk/grants/R000223643/outputs/read/7f36eeae-dd9d-42c4-aad0-71051793f61c> Accessed on 15<sup>th</sup> July 2016.

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